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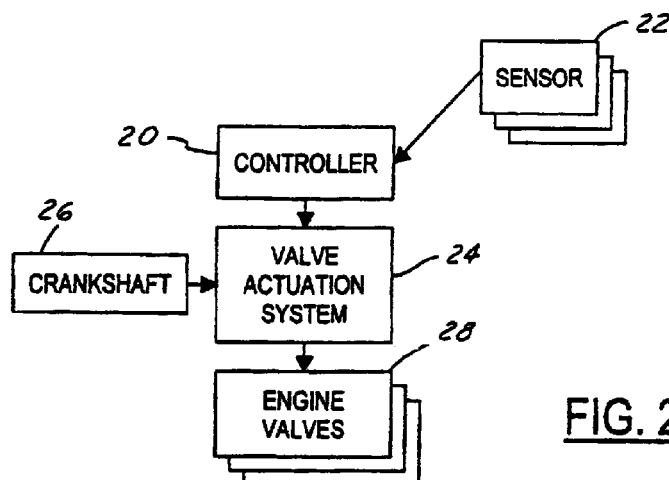
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(54) **Automotive internal combustion engine.**

(57) A multicylinder, reciprocating internal combustion engine includes a controller (20) for operating a valve actuation system (24) so as to define at least three states of engine operation characterised by a first state in which at least some of the engine's cylinder valves (28) are disabled and other cylinder valves are operated at a lesser overlap condition, with a second state being

characterised by disablement of least some of the cylinder valves, with other of the cylinder valves being operated with a greater overlap condition, and a third state in which none of the cylinder valves are disabled and all the valves are operated with a greater overlap.



**FIG. 2**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 5182

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 March 2001	Examiner Paquay, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

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## EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 5182

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THE HAGUE	19 March 2001	Paquay, J	
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X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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